

REMARKS

Claims 1–3, 6, 8, 9, 11–14, and 17 are allowed. No claims are amended. Claims 4, 5, 6, 10, 15, 16, 18, and 19 were previously canceled. Claims 1 and 12 are independent.

1. Information Disclosure Statement (“IDS”)

1.1. Applicants have filed herewith an IDS citing Travis (WO 01/72037) and Fisekovic (“Improved Motion–Picture Quality AM–LCDs Using Scanning Backlight”). Applicants submit that Travis and Fisekovic, considered separately and in combination, fail to disclose or suggest the claimed invention for at least the following reasons.

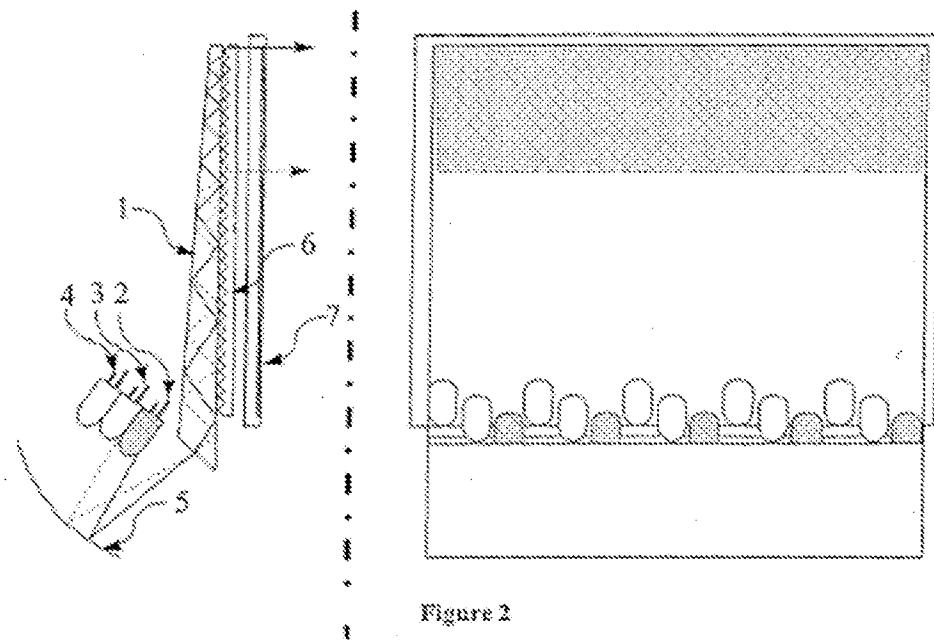
1.2. Travis is directed to techniques for making a flat panel display by projecting an image from a microdisplay (pg. 1, lines 3–5). Travis also considers alternative techniques for providing a collimated light source for displays (pg. 4, lines 1–8). This alternative discloses a single light source configured to inject ultraviolet light into a tapered waveguide and placing a liquid–crystal display over a screen of the waveguide (pg. 14, lines 21–32, FIG. 11).

1.3. Fisekovic is directed a backlighting technique for improving LCD motion picture quality by eliminating a sample and hold artifact (Abstract). The technique involves a backlight that produces a band of light of a certain width that scans vertically over the lines of an LCD panel. The stroboscopic effect of the scanning backlight is to cause lines

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of the displayed object to be seen only at the right moment thus yielding a sharp perceived image (Explanation).

1.4. The present invention discloses various LCD backlighting techniques. For discussion purposes, a reproduction of the original figure 2 of the present Application is provided below:



1.4.1. Illustrated in figure 2 is a tapered waveguide (1) positioned behind a back face of a flat-panel display (7). Also illustrated is a triangular input wedge that is part of and protruding from the thick end of waveguide (1), an input face of the triangular input wedge which is shown receiving light from light array (2) of light arrays (2), (3), and (4) reflected from mirror (5). The taper of the input face in combination with the angle of incoming light determines which portion or band of the waveguide the light will emerge from. Each light array provides light to the input face at an angle different from the others resulting in each light array illuminating a different portion or band of the display

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(see FIGs. 2–4 and the corresponding written description). Each light array extends along an axis of the waveguide and display and illuminates a portion or band along the same axis.

1.5. Regarding independent **claim 1**, the claim encompasses N light arrays that each provide light that extends the width of the display, with a linear taper of an input face of a triangular input wedge of a waveguide relative to an angle of incoming light from an I^{th} light array configured to direct the incoming light to emerge from the waveguide over only an I^{th} portion of N portions of the display where the provided light is along the same axis as the N portions. But neither Travis and Fisekovic suggest light sources illuminating portions of a display where both the light source and the illuminated portions of a display extend along the same axis, and where the portion of the display illuminated is determined by a linear taper of an input face relative to an angle of incoming light from the light source.

1.5.1. Accordingly, Travis and Fisekovic, considered separately and in combination, fail to disclose or suggest:

1.5.2. “a plurality of N light arrays wherein each light array is configured to provide light that is substantially co-extensive with the back face of the display along the X-axis”; and

1.5.3. “a linear taper of the input face of the triangular input wedge that, in combination with an angle relative to the input wedge of incoming light from an I^{th} light array of the plurality of N light arrays, is configured to direct the incoming light from the I^{th} light array to emerge from a face of the slab waveguide over only an I^{th} portion of N portions of the back face of the display, wherein each of the N portions is substantially co-extensive with the back face of the display along the X-axis, and wherein each of the

N portions are a different portion of the back face of the display than any other of the *N* portions”, as recited in **claim 1**.

1.6. Regarding independent **claim 12**, the claims recites features similar to those recited in **claim 1** and is likewise allowable for at least the same reasons discussed in connection with **claim 1**. In particular, Travis and Fisekovic, considered separately and in combination, fail to disclose or suggest:

1.6.1. “wherein each light array of the plurality of *N* light arrays provides light that is substantially co-extensive with the back face of the display along the X-axis”; and

1.6.2. “wherein a linear taper of the input face of the input linear wedge, in combination with an angle relative to the input wedge of the *Ith* light array of the plurality of *N* light arrays, directs incoming light from the *Ith* light array to emerge from a face of the slab waveguide over only an *Ith* portion of *N* portions of the back face of the display, and wherein each of the *N* portions of the back face of the display is substantially co-extensive with the back face of the display along the X-axis, and wherein each of the *N* portions of the back face of the display are a different portion of the back face of the display than any other of the *N* portions of the back face of the display”, as recited in **claim 12**.

1.7. Further, Applicant submit that Travis and Fisekovic fail to overcome the deficiencies of all previously cited art with respect to **claims 1 and 12**. Accordingly, Travis, Fisekovic, and all previously cited art, considered separately and in combination, fail to disclose or suggest the combination of features recited in **claims 1 and 12**. Therefore, Applicants respectfully request that the Examiner consider the included IDS and issue a new Notice of Allowance.

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CONCLUSION

Accordingly, in view of the above Amendments and Remarks it is submitted that the claims are patentably distinct over any cited art and that all the rejections to the claims have been overcome. Based on the foregoing, Applicants respectfully request that the pending claims be allowed, and that a timely Notice of Allowance be issued in this case. If the Examiner believes, after this Amendment, that the Application is not in condition for allowance, the Examiner is requested to call the Applicants' representative at the telephone number listed below.

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REPLY

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time.

Respectfully submitted,
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11-11-2010 /L. Alan Collins/
Date L. Alan Collins

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